Executive Summary

Introduction

People travel thousands of miles from across the United States and around the world to experience the majestic beauty of Glacier National Park. The park's unique treasures and natural and cultural heritage have earned the park designation as the world's first International Peace Park, a Biosphere Reserve, and a World Heritage Site. The preservation of the park's sculpted peaks, crystalline lakes, and pristine wilderness is a legacy to the American people and to the world. Glacier is a world-class natural and cultural resource.

One spectacular feature of the park is the Going-to-the-Sun Road - a National Historic Landmark. Since the early 1930s, the Road has offered the visitor the opportunity to experience the incredible treasures of the park that would otherwise be accessible only by long hikes or horseback rides over treacherous terrain. However, portions of the Road are currently in need of significant structural rehabilitation. In addition, some of the visitor use areas along the Road have reached or exceeded their capacities.

Visitor use on Going-to-the-Sun Road has been identified in the park's General Management Plan (GMP) as one of the eight critical issues that must be addressed to safeguard the quality of park resources and the visitor experience. To formulate and implement strategies addressing this critical issue, the GMP recognized the need to explore public transportation options and develop a visitor use plan for the park. This *Transportation and Visitor Use Study* (Study) is instrumental in providing a summary of existing conditions and a broad base of transportation and visitor use enhancement options possible along the Road. The future visitor use plan will draw on this document as a resource and select the most appropriate enhancements for EIS analysis and implementation. Information in this study will also provide guidance on transportation and visitor use issues for the road rehabilitation period.

Existing Conditions

Understanding existing conditions in the park is the first step in developing improvement options. Chapter 1, Existing Conditions, provides a detailed listing of current conditions in the park.

Roadway Use and Maintenance. Passenger cars make up by far the greatest percentage of traffic on the Road. Shuttle and tour buses, RVs, and bicycles also use the Road. To reduce congestion and improve safety on the Road, vehicle length restrictions are in place from Avalanche Creek to Sun Point. These restrictions prohibit vehicles wider than eight feet (including mirrors) or longer than 21 feet (including bumpers). Restricted vehicles must travel around the park via U.S. 2. Bicycle restrictions are also in place which prohibit bikes from using the Road between Apgar Village and Sprague Creek Campground (both directions), and between Logan Creek and Logan Pass (eastbound only) from 11:00 a.m. to 4:00 p.m. These bicycle restrictions are in effect from June 15th to Labor Day.

Most of the park's roads are not maintained or plowed during the winter season. Plowing generally begins in April and is not typically completed until June (depending on weather conditions). Clearing of snow and other spring-opening activities are the primary maintenance activities on the Going-to-the-Sun Road. Current maintenance practices and funding levels do not adequately provide for the maintenance needs of the road, resulting in the ever-worsening physical, structural, and safety condition of the Road (this topic is addressed in detil in the companion document *Going-to-the-Sun Road Engineering Study*).

Transportation and Transportation-Related Recreation

- Within the park, options for getting around include boat, horseback, foot, bike, or private automobile, most (other than private automobile) primarily as forms of recreation rather than true transportation. Concessioners also provide bus/transit service, offering transportation options ranging from a hiker shuttle to full-day interpretive tours.
- Outside the park, Amtrak provides train service via Chicago and Seattle, with scheduled stops at Belton Station (West Glacier), and seasonally at Glacier Park Station (East Glacier) and Essex. National bus service to the area is provided by Greyhound (to Whitefish). Four airlines also serve the region via the Glacier Park International Airport in Kalispell.

Visitor Facilities, Amenities, and Services

- ***Parking and Pullouts.*** The park has large parking areas accommodating over 200 vehicles as well as small pullouts for a handful of vehicles to park along the roadway. Parking has become a major source of discussion and debate as parking areas have become more crowded, with some exceeding capacity.

- ***Pedestrian Trails.*** Glacier contains approximately 743 miles of trails, eight paved and 735 unpaved. Six of the trails are designated nature trails (two of which are ADA accessible).
- ***Comfort Stations.*** Comfort stations are provided at irregular intervals along the Road, in all campgrounds, and in a limited number of non-campground areas of the park.
- ***Campgrounds.*** There are thirteen class A (paved road, running water, flush toilets, and waste disposal) or class B (gravel road, outdoor toilets, potable water from a pump) campgrounds within Glacier. There are also numerous backcountry camping areas throughout the park accessible only by hiking trails.
- ***Lodging.*** There are six hotel facilities within the park, all managed by the GPI concession. The total capacity of these facilities is 1,527 guests.
- ***Visitor Centers.*** Three visitor centers (Apgar, Logan Pass and St. Mary) exist within the park, each differing in function and level of use.
- ***Picnic Areas.*** The park has ten established picnic areas. Some have potable water, most have comfort stations, and all have picnic tables and fire grates (except Sun Point which has no fire grates).
- ***Signs.*** There are eleven wayside exhibits along the Road which interpret the park for the visitor.
- ***Other Services.*** Groceries, camp supplies, dry goods, and restaurants are available at Apgar Village, Lake McDonald Lodge, Rising Sun, St. Mary, and Many Glacier.
- ***Radio.*** Two radio transmitters provide visitor information at 1610 AM.

Visitor Use Statistics and Information

The following statistics provide a snapshot of current (2000) visitor use throughout Glacier National Park:

- Total visitors: 1,729,000
- High volume months: July and August
  - 60 percent of visitors come to the park in July and August
  - Total visitors in July, 2000 = 515,000
  - Total visitors in August, 2000 = 523,000
  - Average daily visitors in July and August = 16,700
- Percentage of visitors from Montana: approximately 19 percent

- Average Age: 50
- Gender: 55 percent female, 45 percent male
- Education level: 74 percent college-educated

Visitor Use Improvements – A Menu of Options

Driving the Going-to-the-Sun Road is the primary way in which visitors experience Glacier National Park. The Road provides access to the park's interior and links a variety of visitor attractions while passing through seven distinct landscape segments. Driving the Road is an integral part of the Glacier National Park visitor experience. This experience, while perhaps unparalleled anywhere, is not without flaws. There remains room for visitor use improvements.

This study addresses visitor use improvements on two levels: general improvement options, which can be applied to most areas of the Road; and detailed, site-specific improvements for key visitor use areas on the Road. Both the general and site-specific improvement options incorporate the following elements as appropriate:

- ***Use leveling.*** Distribute visitor use from crowded areas to less used areas
- ***Physical improvements.*** Upgrade or expand park facilities
- ***Transit enhancements.*** Implement or improve public transportation facilities

The general improvement options are described below. Detailed descriptions of improvement options for specific sites along the Road are found in *Chapter 2: Visitor Use Improvements – A Menu of Options.*

Scenery and Views. Road corridors and pullouts in the park are in need of vista clearing because vegetation blocks intended and historic views, diminishing the visitor experience. Vista clearing of low roadside undergrowth is also needed in forested areas to open views into the forest. The park has an approved guideline addressing the maintenance of vistas (see Appendix F).

Improvement options:
- Clear vistas at pullouts
- Clear vistas along park roads
- Clear views into the forest
- Develop a plan to implement the existing park vista maintenance guide

Orientation. Proper orientation of the visitor to the attractions and geographic layout of the park is critical to providing a quality visitor experience. The more the visitor knows about the park, the better that visitor's experience will be.

Improvement options:

- Develop and install self-use "orientation stations" at park entrances
- Provide pullouts with information and orientation kiosks
- Provide pullouts with electronic/interactive, real-time information and orientation signage
- Design and develop the west side Discovery Center
- Rehabilitate the St. Mary Visitor Center
- Provide advanced, interactive information on the park's web page

Information. Providing answers to questions of travel time, destination recommendations, and basic logistics will ultimately enhance the visitor experience.

Improvement options:

- Design additional informational exhibits and media
- Improve signs (directional and informational)
- Develop Intelligent Transportation System (ITS) opportunities
- Provide real-time information
- Develop new media (audio, DVD)
- Design and develop west side Discovery Center
- Rehabilitate the St. Mary Visitor Center
- Develop handouts on rehabilitation projects
- Design additional personal services opportunities
- Expand TIS radio services at key locations along the Road
- Design and install portable kiosks/bulletin boards at key locations
- Expand web page to address changes and provide real-time information
- Expand educational programs and outreach

Interpretation. While orientation gives the visitor an initial perception of the park and information answers their questions, interpretations tell the stories of the park and the region. A Comprehensive Interpretive Plan (CIP) will be developed in 2002 to determine what those stories are and how/where they should be told.

I**mprovement options:**

- Move forward with CIP
- Provide additional interpretive experiences in other areas of the park to level use

- Design and develop west side Discovery Center
- Rehabilitate the St. Mary Visitor Center exhibits, media, and sales areas
- Develop new park film for the proposed Discovery Center and the St. Mary Visitor Center
- Evaluate and rehabilitate seating at interpretive areas through CIP process
- Participate in special events and regional partnering to level use
- Expand programs and outreach opportunities
- Design additional personal services opportunities

Comfort Stations. Comfort stations are in relatively short supply and are typically located in congested areas.

Improvement options:

- Rehabilitate existing comfort stations
- Emphasize comfort stations on lower elevations
- Maintain and supplement comfort stations where demand is high
- Place comfort stations where use is low but parking is available
- Upgrade to SSTs and to provide ADA accessibility
- Integrate orientation, information, and interpretation opportunities
- Place locator signs on roads
- Provide maps locating comfort stations in informational material
- Develop standards for all comfort stations

Parking. Parking spaces, especially at Avalanche, the Loop, Logan Pass and Sunrift Gorge are at a premium during peak periods. With the use of interactive signage, real-time parking information can be relayed to visitors as they traverse the Road.

Improvement options:

- Provide real-time parking information at orientation stations, visitor centers, and the lower sections of the Road
- Limit or eliminate parking where resources are threatened or safety is an issue
- Separate pedestrian circulation from vehicle circulation
- Encourage head-in parking
- Provide additional parking areas

Pullouts. Pullouts are sometimes being used for unintended purposes, such as climbing and hiking. Some pullouts are on the opposite side of the Road from park attractions, creating a hazard for pedestrians. Still other pullouts have been created over time by visitors who pull off the Road in unregulated areas.

Improvement options:

- Clear vistas at scenic pullous
- Add pullouts with level access to the slow-moving/serene portions of McDonald Creek
- Add more slow-moving vehicle pullouts
- Formalize and/or remove existing social pullouts
- Correct and/or remove unsafe pullouts

Biking. Bikers are faced with limited bike paths and bike restriction on the Road. With improvements, biking could be an effective alternative to vehicle use on the Road during designated times.

Improvement options:

- Provide additional bike paths in the park
- Consider widening some park roads to provide bike lanes
- Encourage biking on Camas Road
- Place auto restrictions on the Going-to-the-Sun Road during certain times to allow bikes only
- Provide public information and maps on existing bike trails
- Provide bike racks and lockers
- Provide bike racks on park shuttles and regional shuttles
- Encourage multimodal opportunities

Access to Forest and Water. These are two of the defining characteristics of the park. Although visitor access to these features is available, it is generally not via defined trails and therefore can be unsafe and, in certain locations, has resulted in damage to natural resources.

Improvement options:

- Provide additional opportunities at low elevations for safe access to forest and water
- Provide new, easy trail through the forest on west side to reduce use at Avalanche
- Provide short walks to “discovered” features
- Provide ADA access to water

Picnicking. Picnic areas exist throughout the park, but many could be improved.

Improvement options:

- Upgrade existing picnic areas

- Provide ADA-accessible picnic facilities
- Provide additional picnic areas
- Relocate existing facilities, (i.e., Avalanche and Sun Point)
- Develop park standards for picnic areas

Camping. Camping is a popular activity for park visitors. Some campgrounds, such as Avalanche and Sprague Creek, are consistently full, while others have vacancies even during peak seasons.

Improvement options:

•Upgrade campgrounds and associated comfort stations
•Reduce density within campgrounds, i.e., larger sites
•Provide showers at campgrounds
•Provide ADA-accessible sites
•Provide bear-proof food lockers
•Provide bike racks
•Separate tent camping from large vehicle camping
•Develop park standards for campsites.

Children's Activities and Services. For young children, traveling for long periods of time in unfamiliar territory can be difficult. Providing play areas or other features aimed at young children could improve the visitor experience for the entire family.

Improvement options:

- Design and develop a children's section in the west side Discovery Center and rehabilitated St. Mary Visitor Center
- Design and install children's discovery trails (one on the east side, and one on the west side)
- Add a children's playground area at the west side Discovery Center and St. Mary Visitor Center
- Expand children's interpretive programs
- Provide family-friendly bike trails
- Identify nearby licensed day-care providers

Transportation Connections. Many visitors use more than one mode of transportation while experiencing the park. They may drive, bike, hike, or seek shuttle service from one area of the park to another. An intermodal transportation network needs to be developed for seamless park access and peak visitor experience.

Improvement options:

- Promote historic exploration of the park by horse, bicycle and/or red bus; provide parking for these activities away from congested areas
- Provide information/orientation on the benefits of and options for alternative transportation
- Create more shuttle opportunities, so hikers on one-way trails do not need two cars
- Implement a comprehensive transit system (see Chapter 3: *Transportation System Options*)
- Coordinate with regional transportation providers for convenient and affordable shuttle service from the airport and surrounding communities to connection points for park transit
- Expand boat shuttles for hikers and bikers
- Institute a water shuttle from Apgar Village to Lake McDonald Lodge for hikers, bikers, and other visitors
- Expand the designated bicycle network, linking into developed areas and trailheads
- Install bicycle racks on buses and boats
- Develop a bicycle trail linking the train station/West Glacier to Fish Creek Campground, Apgar Village, and Apgar Campground
- Designate a bicycle route along Camas Road

Safety. Every effort must be made to eliminate unnecessary hazards and to educate visitors – especially pedestrians and bikers -- about the inherent dangers associated with visiting Glacier.

Improvement options:

- Redesign parking areas so they are always located on the same side of the road as the visitor attraction
- Design improved pedestrian crosswalks
- Design and install signs and handouts at entry stations to yield to pedestrians in designated crosswalks
- Increase enforcement of crosswalks and pedestrian issues
- Provide information on hazards in the park (i.e., falling rocks, slippery rocks and cold water in streams, etc.)
- Harden trails near hazards
- Provide separate/designated bike facilities

Transportation System Options

Going-to-the-Sun Road will undergo significant rehabilitation in upcoming years to address safety and structural concerns. In order to minimize the impact of such a rehabilitation, the park must develop alternative transportation strategies to preserve the quality of the visitor experience.

Transit System Options

If a transit system can take just a small percentage of traffic off the Going-to-the-Sun Road (i.e., ten to fifteen percent during peak hours) the Road will realize a significant reduction in congestion. However, providing a visitor-friendly transit system will be expensive and will have to be financially subsidized, as most transit systems in the United States are. An effective transit system can be used as a tool to manage traffic on the road while rehabilitation work is underway, perhaps conditioning visitors to use it even after the rehabilitation is complete. Further, federal funding for the capital costs of a transit system can be requested as a part of construction mitigation.

Three transit options have been developed for consideration:

Option A – Existing Shuttle Service. This option represents the existing shuttle bus system currently operated by GPI. This service has headways (i.e. the time between buses) of between two hours and five and a half hours.

Option B – Improved Shuttle Service. This alternative is designed to provide an improvement over the existing shuttle system. Transit vehicles would leave the west side and east side of the Road every 60 minutes.

Option C – Aggressive Shuttle Service. This alternative is designed to provide a significant improvement over the existing shuttle system. Routes would be the same as Option B, but service would be provided every 30 minutes.

Transit stops are proposed at the following locations:

- West Glacier
- Apgar Village
- Lake McDonald Lodge
- Avalanche
- McDonald Creek
- The Loop
- Big Bend
- Logan Pass
- Siyeh Bend
- Jackson Glacier Overlook
- Sunrift Gorge
- Sun Point
- Wild Goose Island Overlook
- Rising Sun
- St. Mary Visitor Center

Ridership

Ridership is expected to increase to 100 to 125 passengers per day (6,600-8,250 per year) for Option B and 200 to 250 passengers per day (13,200-16,500 per year) for Option C. (If very aggressive Transportation Demand Management (TDM) strategies are instituted by the park, the 2000 Survey of Visitors indicates that ridership could increase to as much as 3,175 riders per day.)

Operating Costs

As previously stated, enhanced transit service would have to be subsidized in order to cover the cost to operate the service. Operating costs include labor, fringe benefits, vehicle maintenance, fuel/oil/lubricants, maintenance supplies, utilities and vehicle insurance. Estimated operating costs for each transit option are as follows:

- Option A – $34,500 to $55,500 per year
- Option B – $125,400 to $200,600 per year
- Option C – $241,000 to $385,400 per year

These operating costs are calculated in 2001 dollars and can be expected to increase between three and one-half and four percent per year.

Operating costs for expanded transit service (Options B or C) will be offset to some degree by increased ridership. However, for passenger fares to cover the total operating costs for the service, an average fare of $27 (for Option B) and $26 (for Option C) would have to be charged to riders. The 2000 Survey of Visitors clearly demonstrates that visitors are not willing to pay nearly that much for transit service.

A more appropriate fare structure, one that would encourage transit use, would be a non-distance based fare of $2.00 for Option B and $4.00 for Option C. A nominal use fee ($1.20-$3.67) could then be charged to all vehicles entering the park to cover the difference between fare revenue and operating expenses for each option.

Another alternative is to make the transit system available at no charge to the user, and assess a more substantial surcharge ($1.34-$4.24) to all vehicles entering the park. These surcharges do not cover the one-time capital costs required to purchase the initial fleet of buses, or the costs to provide appropriate infrastructure such as transit stations, bus stops, and parking.

Service Facilities

Transit Centers/Parking. If either Option B or C is chosen, a transit center will be required at both ends of the Road. At the west end, the transit center can be located at West Glacier, Park Headquarters, the "T" intersection, near Apgar Village, or on the outskirts of the park. The transit center could stand-alone or could be constructed in conjunction with the planned Discovery Center. On the east end of the Road, a transit center could be placed at the St. Mary Visitor Center, Rising Sun, or Sun Point. It is estimated that the capital and installation costs associated with each transit center building would be between $400,000 to $600,000.

Parking demand at the west end transit center is estimated at 28 spaces for transit users under Option B and 58 spaces under Option C. At St. Mary, the needed parking would be 14 spaces for Option B and 28 spaces for Option C. (If very aggressive transportation demand management (TDM) strategies are implemented by the park, parking demand could increase to as much as 740 spaces on the west side and 360 spaces on the east side.)

Bus Shelters. Bus shelters should be built to provide protection from the elements; promote cross-ventilation; and incorporate benches and/or leaning rails, route maps, and other appropriate customer amenities. Informational signs could also be placed at bus stops to provide educational reading opportunities while waiting for a bus to arrive. Advanced intelligent transportation system (ITS) applications may also one day be provided, which inform waiting passengers exactly how many minutes they will have to wait for the next transit vehicle with a real-time countdown. As an added security measure, all bus shelters and stops could be provided with emergency phones that are connected to park offices and/or transit operators.

Bus shelter costs can vary depending on the design and size of the shelter. Standard metal mesh shelters with shatterproof glass cost approximately $5000 installed, depending on the dimensions and various features chosen for the shelter. It is likely that bus shelters for the park could require more careful design considerations to be historically sensitive and blend into the natural environment, and could cost between $15,000 and $25,000 installed.

Regional Transportation Connections. Several large transportation operators provide service to the area around Glacier. These include rail (Amtrak), bus (Greyhound), and air (Glacier Park International Airport). Based on information available from these providers, transit operators can schedule routes to accommodate visitors as they arrive or depart. Park visitors can plan their trips without renting a vehicle to

get to the park. If regional providers deliver passengers to the park, supporting transit service will be required to transport visitors to key destinations in the park. In coordinating with regional providers, Glacier should encourage the use of fully accessible (ADA) buses equipped with bicycle racks.

Transportation Management Strategies

Transportation Demand Management (TDM) strategies, will be necessary for transit to become an effective congestion mitigation measure. In fact, the transit system proposed for the park does not make sense without such a program. The primary purpose of a TDM program is to reduce travel demand and increase utilization of the transit system. An effective TDM program includes incentives, disincentives, and supporting measures to encourage visitors to choose the transit system over their private automobile.

Incentives are measures that make riding the transit system more appealing to the visitor. Examples include:

- Subsidies
- On-demand transit
- Transit expansion
- Park & ride lots
- Seamless intermodal links
- Free or reduced transit fares
- Reduced park fees for transit users
- Connections to regional transit

Disincentives are measures that negatively impact the visitor using a private automobile thus encouraging use of the transit system as an alternative to driving. Examples of disincentives include:

- Maximum parking duration
- Auto-free zones
- Congestion pricing
- Limited capacity for private autos
- Paid parking
- Limited parking supply
- First-come, first-served access
- Increased private vehicle entry fee

Supporting Measures provide information and services to assist the visitor in selecting the transit system as the preferred method of traveling the Road. Examples of supporting measures include:

- Transportation coordinator
- Transportation information centers
- Real-time traffic information
- Transportation information program
- Bicycle and pedestrian improvements
- Inviting transportation facilities

The most reasonable strategy for implementing a TDM program at the park is an incremental approach. The number of TDM measures applied depends on the extent to which traffic exceeds a defined target. In this case, the defined target must be determined. If it is assumed that traffic on the Road during peak periods reaches unacceptable levels of congestion, and that traffic congestion will be exacerbated during rehabilitation of the Road, a reasonable target would be to reduce traffic by fifteen percent (studies have shown that a ten to fifteen percent reduction in traffic results in a significant reduction in congestion).

Public awareness elements of the TDM program give park visitors the opportunity to change their behavior to avoid additional measures such as higher entrance fees or limits on vehicle access to the Road. Additionally, an incremental TDM approach allows decision makers at the park to learn from past experiences so that they can more accurately predict the impact of future TDM measures.

A major feature of the incremental TDM approach is the collection and analysis of data. Average Daily Traffic (ADT) counts during the peak season are used to determine when and where to implement TDM measures. If the ADT counts show that the target has been exceeded by less than five percent, no additional traffic monitoring is needed. If the ADT counts reveal that the target is exceeded by five percent or more, additional monitoring is conducted.

TDM program elements are classified into three levels plus supporting actions:

Level 1 Actions are implemented as soon as possible to help reduce daily vehicle trips and get the visitor accustomed to using transit. The focus of these actions is to build the organizational structure for implementing the TDM program, and to start initiating changes in driver behavior.

Level 2 Actions are designed to reduce traffic by up to five percent. Improvements can include reducing headways, providing quicker route times through construction areas, and expanding service areas.

Level 3 Actions are designed to reduce traffic by five to fifteen percent. With the help of accurate traffic counts, limits on the number of private autos allowed on the Road are enforced. Once the maximum level is reached, visitors must use transit to travel the Road.

Supporting Actions are measures to help ensure the success of Level 1-3 actions.

The menu of TDM options described in this report can be used by NPS staff to create a transportation system in the park that maximizes the visitor experience during and beyond rehabilitation of the Going-to-the-Sun Road. A combination of transit system improvements and TDM strategies is recommended to mitigate congestion during rehabilitation and improve the overall, long-term traffic management strategies in the park. The following table represents an example of a such a comprehensive approach and the estimated costs of each option in 2001 dollars.

Example Cost of a Comprehensive Transit and TDM Program

Transit System/TDM Measure	Cost	
Transit System		
Transit system as per Option B, 25-passenger buses (assumes a $30/hr operating cost)	Capital costs (buses): Operating costs (annual):	$ 542,500 $ 205,000
Two transit centers (Apgar and St. Mary)	Construction costs:	$ 800,000
Bus shelters at all stops (historically accurate)	Construction costs:	$ 250,000
On-demand transit system to serve Many Glacier and East Glacier	Annual cost:	$ 20,000
TDM Program –Level 1(Early Action)		
Full-time coordinator plus marketing and staff	Annual Cost	$ 125,000
Permanent road counters (3)	Construction Costs:	$ 15,000
Intercept survey	One-time Cost:	$ 10,000
Roadside ITS displays (2)	Construction Costs:	$ 70,000
Supporting TDM programs	Annual Cost:	$ 70,000
Total Costs	One-time, Initial Costs: Ongoing, Annual Costs:	$ 1,687,500 $ 425,500

An illustration of how the incremental TDM approach would affect the visitor experience is provided in the Transit Summary beginning on page 142 of Chapter 3. This

anecdote shows how a typical family could use the transportation system, as well as the information system described in Chapter 4, to plan and enjoy a world-class experience in Glacier within a limited time frame.

Visitor Information

Information is the key to providing a quality visitor experience during the Road rehabilitation period. As the responses from the *2000 Survey of Visitors* demonstrated, if visitors or potential visitors know ahead of time that Going-to-the-Sun Road is under construction, and if they have detailed, accurate information about how, where, when, and to what extent the construction might affect their travel on the Road, they can and are willing to adjust their plans accordingly.

In order to prepare for the effects the rehabilitation may have on their travel plans, visitors should be provided with the following messages:

- Rehabilitation is necessary to maintain the safety, beauty and historic significance of the Road
- Although vehicle access across the Road will be maintained to the greatest extent possible, delays will occur
- Delays, closures, and other restrictions on the Road and other attractions in the park will be communicated as quickly and as comprehensively as possible
- Transit options are available to minimize the impacts of construction. Information on the transit options should include:
  - benefits/advantages during construction delays
  - costs
  - schedules
  - locations and frequencies of stops
  - reservations and tickets
  - parking

This information should be provided long before the visitor arrives at the entrance gate. Information must then continue to flow to the visitor for as long as they remain in the Glacier area. Information could be provided via:

- A special, very prominent page on the Glacier website.

- Links to this web page from the main NPS web page, other government web pages, prominent travel information web pages (AAA, GORP, etc.), and local government/chamber/business web pages.
- Attachments sent in response to all e-mailed requests for information about the park, whether the request was related to the rehabilitation or not.
- Public service announcements on local radio.
- Enhanced Traveler Information System (TIS) radio system in the park.
- Messages on local cable access channels.
- Variable message signs along the Road.
- Articulate/well-informed/outgoing traffic flaggers.
- Posted messages at visitor centers, west side Discovery Center, kiosks, campground bulletin boards, and park lodges.
- Handouts at entry stations.

While general information can be preprinted, by far the most useful information is that made available in real time.

Innovative technologies, such as fiber optics, could greatly benefit the park during the rehabilitation of the Road and into the future. Traditionally, fiber optic construction includes trenching or boring along the entire route, a technique that would have significant impacts on the Road, the park, and the visitor. New technologies are now available which can quickly place multi-strand fiber optic cable less than two inches below the surface in asphalt or concrete. New techniques are environmentally sensitive and minimally intrusive on the Road and visitors. This system could be the spine for the collection and dissemination of information along the Road.

In creating such a system, Glacier would serve as a model for other National Parks. The system would improve safety, interpretation, and visitor services along the road, providing a communication and information carrying conduit that can be accessed as necessary to improve facilities and provide exciting and innovative visitor experience advances.